## **REMARKS/ARGUMENTS**

Reexamination and reconsideration of the rejection of claim 11 is earnestly requested. Claim 11 has been rejected under 35 USC 102(b) as being anticipated by Miller (3,680,305). The examiner has stated that among various elements, that Miller discloses a retro-tube 42 attached to said exhaust port 28 wherein said retro-tube 42 is of approximately constant diameter and having a volume approximately equal to a swept volume of said piston movement in said cylinder.

The Miller feature 42 is disclosed as an exhaust conduit 42 between the engine exhaust port 28 and a turbine 38, column 3, lines 52 through 55. There is no disclosure or consideration of the structural form of the exhaust conduit 42 as this patent includes a compressor 30 to create conditions necessary in the engine. The intake air is not environmental air, but rather compressed air. Therefore, a specific volume or structure for the exhaust conduit 42 is not necessary. There is no motivation for an anticipation of a structure as claimed in claim 11 of the instant invention.

It is believed Miller does not disclose, anticipate or make obvious the structural characteristics of the instant invention. Traditional two stroke engines, such as Miller, must have a pressure air source, e.g., a compressor or the like, connected to the cylinder intake ports in order to operate. This is necessary for a pressure difference to exist in such engines in order for airflow to occur through the engine. Therefore, in engines such as Miller's the exhaust conduit 42 characteristics are not generally considered in detail as evidenced by the specification and drawings that do not illustrate the specific physical characteristics such as diameter over the entire length or volume.

The instant invention uses environmental air rather than a compressor condition air and therefore must have a sub-atmospheric pressure at the exhaust port in order for the engine to run. The claimed design of the engine is such that when the cylinder intake ports are opened, air rushes in because the outgoing column of exhaust gases may have produced a decrease in air pressure at the exhaust port. No compressor conditioned air is necessary. For these conditions to occur the retro-

tube or exhaust should have a volume optimized for the operation of the engine. It is believed an engine operation for unique structural characteristics is disclosed and claimed in the instant application and that an engine with conditioned air by a compressor does not point toward or anticipate such characteristics.

Claim 11 has also been rejected under 35 USC 102(b) as being anticipated by Jonsson (5,163,388). The examiner has stated that among various elements, that Jonsson discloses a retrotube 17 attached to said exhaust port wherein said retro-tube is of approximately constant diameter and having a volume approximately equal to a swept volume of said piston movement in said cylinder. In the Jonsson Figure the exhaust pipe 17 appears to be a port of the engine block and having a varying diameter that is relatively smaller at the cylinder wall defined as a port and relatively larger at the exterior opening to the engine block. The engine has a super charger 20 to condition air rather than using environmental air. The disclosure and drawings do not address the necessary characteristics of an exhaust or retro-tube that might be attached to the engine.

As discussed above with regard to the Miller art, two stroke engines such as Jonsson's that use conditioned or compressed air do not treat the exhaust system and other features of an environmental or unconditioned air intake system as important to engine operation. The operational aspects and therefore the structural aspects of the instant application invention are different from that of a conditioned air intake system such as Miller and Jonsson. The instant invention important features are quite different than traditional compressed air two stroke engines; therefore, there is no disclosure, anticipation or obviousness for the new invention based on conditioned input air technology. Features such as the exhaust system structure are not addressed.

It is believed that the uniqueness of the instant invention as claimed in claim 11 is not disclosed in the cited art. Applicant believes that the unique solution although being simple in its implementation was not anticipated or obvious to those involved in the art of two-stroke engine design.

Accordingly it is believed that the rejections under 35 USC Section 102(b) have been overcome by the remarks, and withdrawal thereof is respectfully requested.

In view of the above, it is submitted that the claims are in condition for allowance. Reconsideration of the cause for rejections of claim 11 is requested. Allowance of claim 11 is earnestly solicited. Claims 12 through 14 have been considered allowed or allowable.

No additional fee for claims is seen to be required.

If you have any questions do not hesitate to contact me.

Very truly yours,

DENNIS W. BEECH Reg. No.: 35,443 Customer No. 042794

DWB/ab

## JAN 1 9 2006 B

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

in regards to application of:

Serial Number:

10/758,839

Applicant:

James W. Lacy

Filing Date:

01-16-2004

Title:

**ENGINE EXHAUST SYSTEM** 

TC/AU:

3747

Examiner:

Ali, Hyder

Mail Stop AF

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

## **EXPRESS MAIL CERTIFICATE MAILING UNDER 37 CFR § 1.10**

"Express Mail" label number: EV 728551413 US

Date of Deposit: January 19, 2006

I hereby certify that the following attached correspondence comprising:

5 Pages of Response

is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR § 1.10 on the date indicated above and is addressed to:

Mail Stop AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Date: 1-19-06